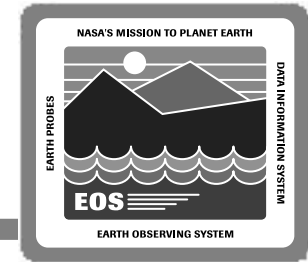# GUI Workshop I - Desktop

Padmaja Prabhala (pprabhal@eos.hitc.com)

**Durga K Kuchipudi** (dkuchipu@eos.hitc.com)

2nd Feb. 1996

Overview of the Desktop

- **A framework to manage ECS applications**

- **Each file in a user's account is represented as an icon on the Desktop. These are also called Desktop Objects. There are three types of Desktop Objects**

  - **Applications (For ex. ECS Applications like Advertising Service etc.) .**

  - **Documents (For ex. Image Files, Text files etc..)**

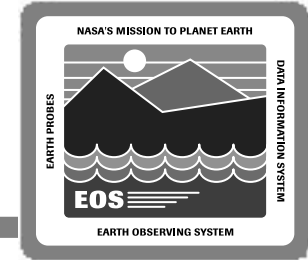 - **Containers (For ex. Directories)**

Overview of the Desktop
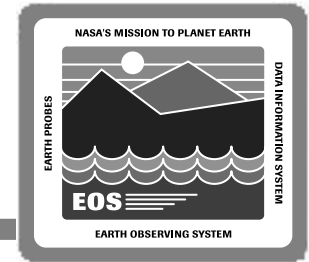
- **Each desktop object will have**
    - **a name**
    - **an icon**
    - **a set of Desktop actions.**
    - **a command to execute**

    For applications and documents these actions are stored in actions file in user's home directory.

- **Default icon for**

    Applications is
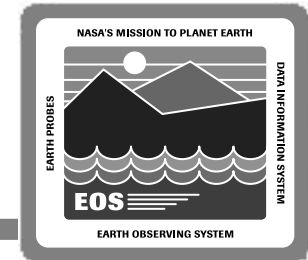
    Documents is

    Containers is

Overview of the Desktop

- **Menubar choices are used to activate some of the features of Desktop. These options can be invoked either by clicking on them using Button-1 or using Mnemonics. For ex.**

  - **To invoke file pulldown menu, type <ALT>-F**

- **Each menubar option will have a set of features arranged in its pulldown menu. Some of these features will be associated with Desktop objects, i.e. User may have to click on a desktop object to activate its related features.**

- **The Desktop Menubar is arranged as per CDE (Common Desktop Environment) FileManager's Menubar as shown below :**

Indicates current directory

/home/dkuchipu/

File   Selected   View   Tools   Help
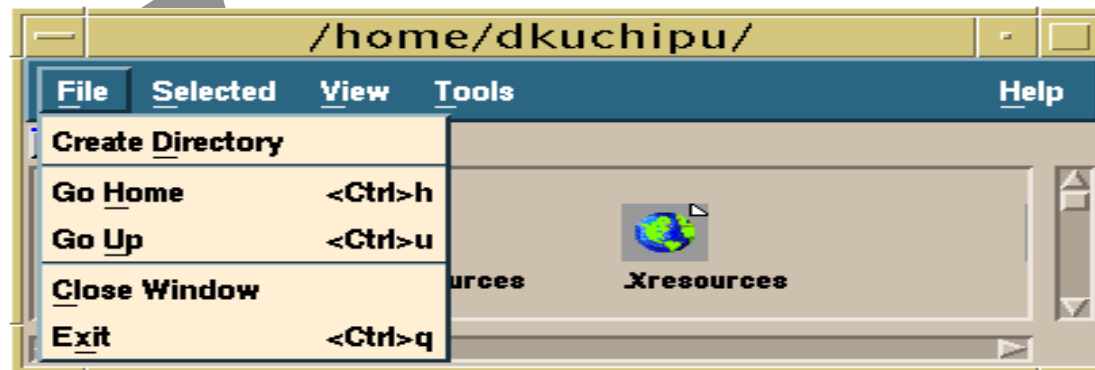
/home/dkuchipu/
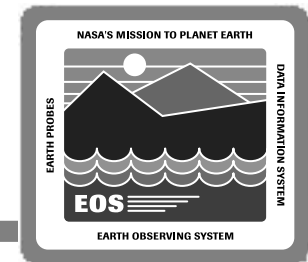
File Pulldown Menu

- **File pulldown menu provides basic directory navigation and window control**

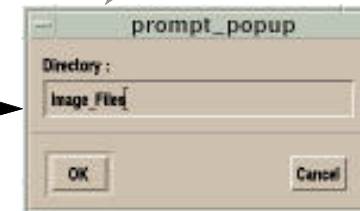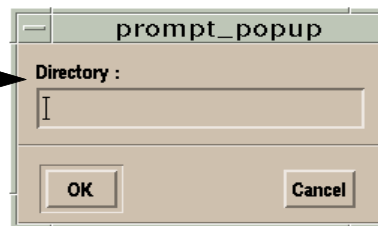Click on File using Button-1 or press < ALT>-F on the keyboard to post the file menu.

/home/dkuchipu/

| File | Selected | View | Tools | Help |

Create Directory

Go Home   <Ctrl>h

Go Up   <Ctrl>u

Close Window

Exit   <Ctrl>q

.Xresources

Creating a Directory

Click on "File" pulldown menu and select "Create Directory"
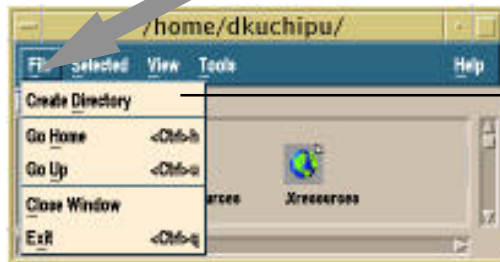
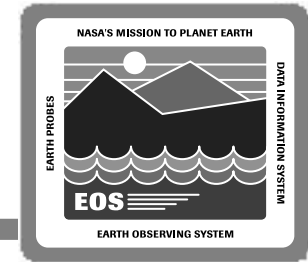**Enter the name of the directory to be created.**

Directories are useful for arranging similar / functionally related files. The user has complete control of directory creation and contents.
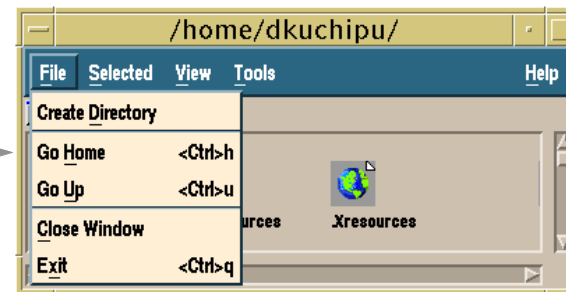
Click on OK to create directory

Click on Cancel, to cancel the operation
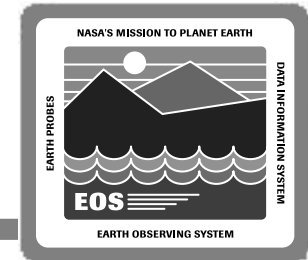
User's Home Directory

- **User's Home Directory is the highest level directory in their account. All sub-directories branch out from here.**

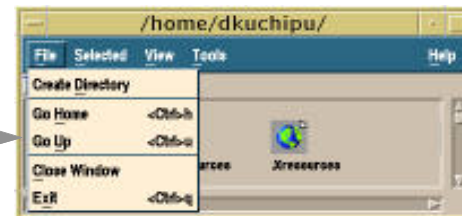Click on "File" pulldown menu, and select "Go Home"

Traversing Directories

- **User can move from one directory to another by clicking on a directory icon.**

- **User can go one level up by using either of the 3 methods:**
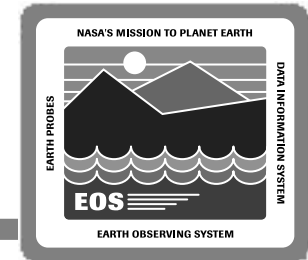
1. Click on "..(go up)" icon
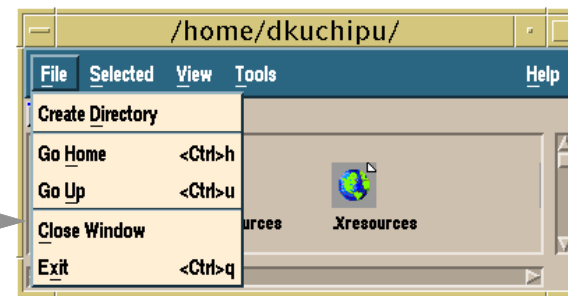
2. Click on "File" pulldown menu, and select "Go Up"

3. <CTRL>-U on keyboard

Closing a Desktop Window

Click on "File" pulldown menu, and select "Close Window"

/home/dkuchipu/

File Selected View Tools Help

Create Directory
Go Home <Ctrl>h
Go Up <Ctrl>u
Close Window
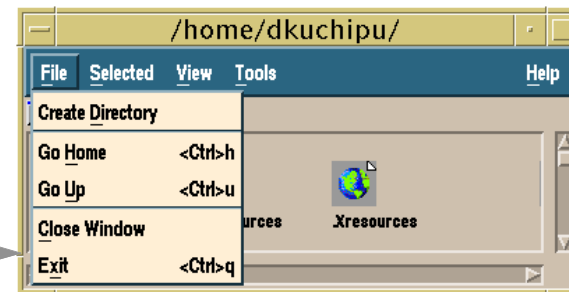Exit <Ctrl>q

Xresources

- **This dismisses the active window from screen**

- **This does not effect the user's files in anyway.**

- **Closing last desktop window exits the system and returns to system prompt.**
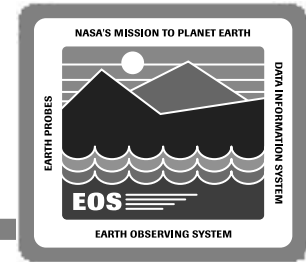
Exit the system
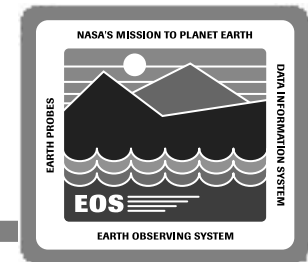
**Click on "File" pulldown menu, and select "Exit"**

- **To exit the system and return to the system prompt.**

- **Exiting the system empties the trash directory.**

- **User will be prompted for confirmation before Exit operation is performed.**

Selecting Multiple desktop objects

- **Selection of multiple files :**
  - **Depress button-1 and drag the mouse without releasing the button.**
  - **Rubber-banding rectangle is formed.**
  - **User can resize the rectangle to include his /her selection of multiple files.**
  - **Release the button-1.**
  - **Each icon within the selection rectangle will have a colored "border".**

- **Operations like delete, drag can be performed on this selection following the same procedure as for single selected files.**

Drag and Drop
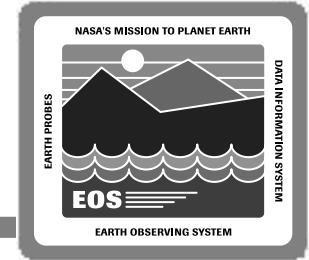
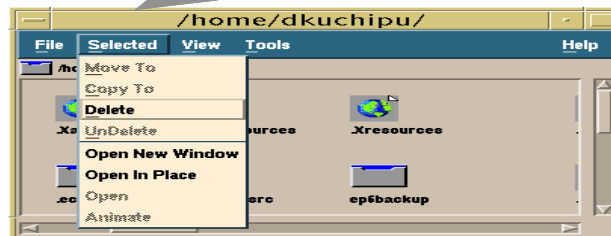- **Drag and Drop is one of the most important features of Desktop.**
  - **Desktop objects can be moved from one directory to another by :**
    - –**dropping it on a directory icon**
    - –**dropping it on another desktop window.**
  - **When a image file is dropped on EOSView, EOSView application is opened to perform default action of the image file (either OPEN or ANIMATE)**

- **Drag a desktop object with <u>button-2</u> and drop it on a directory icon, another desktop window or EOSView icon depending on requirement.**

- **Users can drag a single icon or multiple icons.**
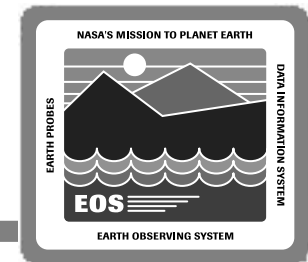
Selected Pulldown Menu

- **Selected Pulldown menu consists of options which are specific to Desktop Objects.**

- **This menu consists of two sets of options separated by a separator.**
    - **First set (the options above the separator) is general to all the Desktop Objects i.e.., all icons.**
    - **Second set (the options below the separator) are also called Actions.**
        - **In order to activate options in this menu, user should click on a Desktop Object (i.e., an icon) before selecting the pulldown menu. Details about actions will be discussed later.**
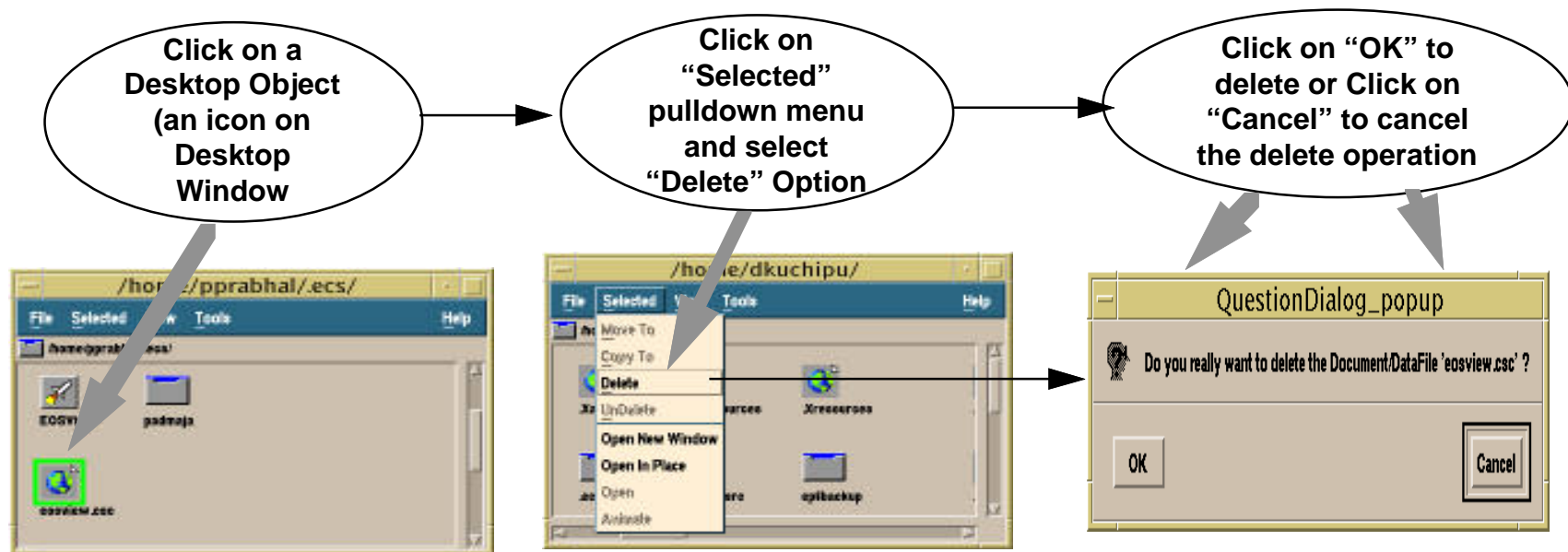
**Click on "Selected" using
Button-1 or press <ALT>-S
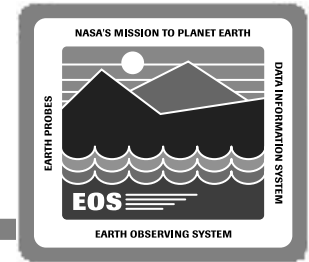on the keyboard to post
"selected" menu**

/home/dkuchipu/

| File | **Selected** | View | Tools | Help |

Move To
Copy To
Delete
UnDelete
Open New Window
Open In Place
Open
Animate

Xresources

ep6backup

Deletion of Single Desktop Object

- **User can delete any unnecessary file(s).**

- **The deleted files will be removed from desktop window and will be moved to trash directory.**

- **User can delete single/multiple Desktop Objects.**

- **User will be prompted for confirmation before delete operation is performed.**

- **In order to delete a single file , use the following method:**

Click on a Desktop Object (an icon on Desktop Window) → Click on "Selected" pulldown menu and select "Delete" Option → Click on "OK" to delete or Click on "Cancel" to cancel the delete operation
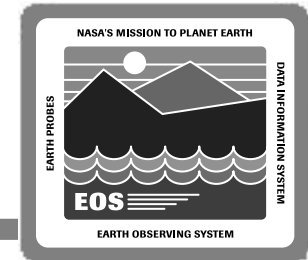
Deletion of Single Desktop Object

- **Empty container objects (directories) can be deleted.**
- **Deleting non-empty container objects results in the following error:**
  - **For ex. Delete a directory named "Junk".**
  - **Use the method mentioned in the previous slide to delete the directory "junk", Click on "OK" to delete. You will get the following error message:**
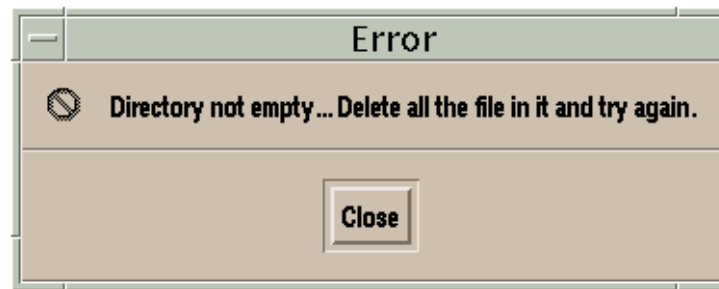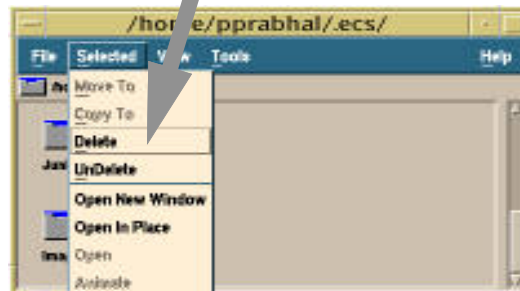
Deletion of Multiple Desktop Objects

- **If the user desires to delete multiple desktop objects, the following method should be used.**

- **If the selection contains non-empty container objects (i.e., directories), the user will get an error message as explained in the previous example, and remaining objects will be deleted.**
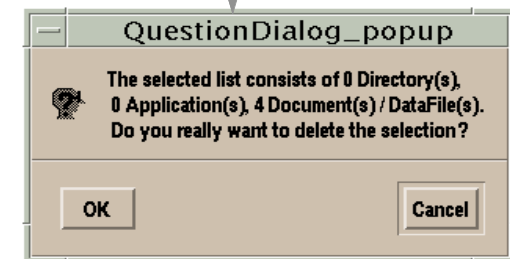
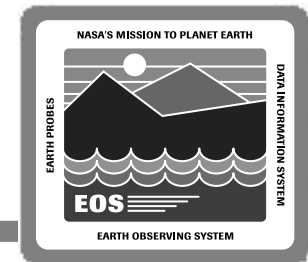**Drag button-1 of mouse. The files in the rectangle will be highlighted.**
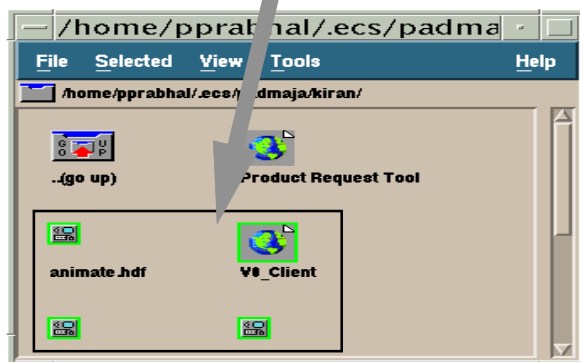
Click on "Selected" pulldown menu and select "Delete" option

A dialog box with information on number of selected objects pops-up. Click on "OK" to delete or "Cancel" to cancel the delete operation.
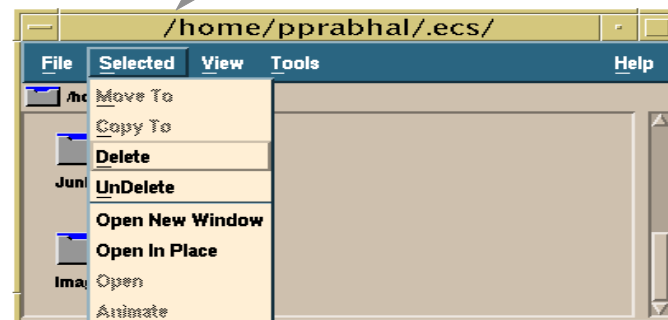
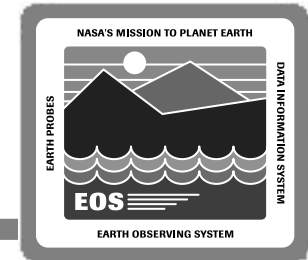# UnDelete Desktop Objects

- **The Desktop Objects can be undeleted by using the UnDelete option.**
- **Single & Multiple desktop objects can be undeleted.**
- **This option will be available only when some objects have been deleted.**
- **Single level of UnDelete is supported.**

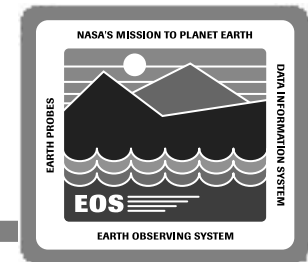**Click on "Selected" pulldown menu, select "UnDelete"**

Desktop Actions

- **Each Desktop Object will have one or more related actions. Default actions are in bold below:**

  - Application Object (Applications like Advertising Service etc.) : **Open**

  - Document Object (Documents/ data files like Image files)   : **Open**, Animate

  - Container Object (Directories)   : **Open In Place** , Open New Window

- **Desktop Actions are the options which are present below the separator in the "Selected" pulldown menu.**

- **On Selecting an Desktop object (i.e. icon), action(s) associated with it will be activated.**

- **To execute an action, click on the desired option.**

- **Default action can be executed on double-clicking on the Desktop Object itself.**
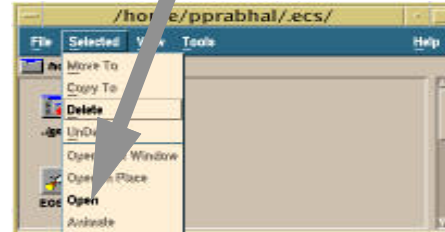
Desktop Actions : Examples

To open/execute an application
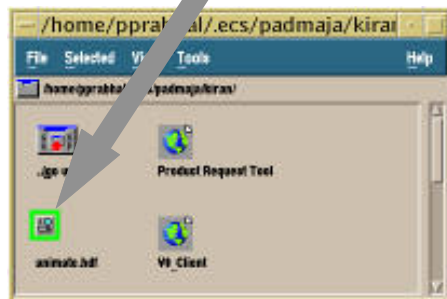
Click on a application icon.
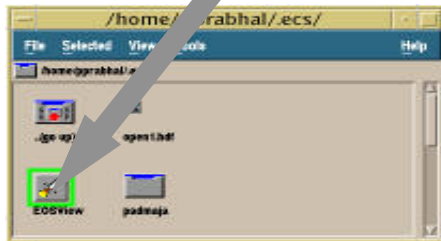
Click on "Selected" pulldown menu, user will find that one action is activated. Select "Open "
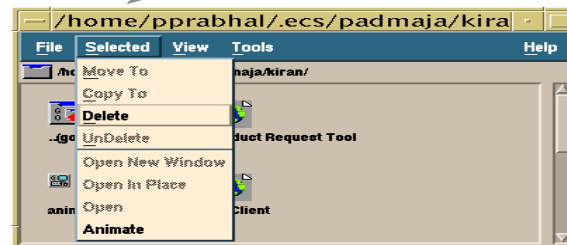
To open a document

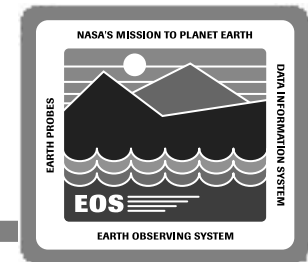Click on a document i.e., a image file icon.

Click on "Selected" pulldown menu, user will find that one action is activated. Select "Animate"

Padmaja-19
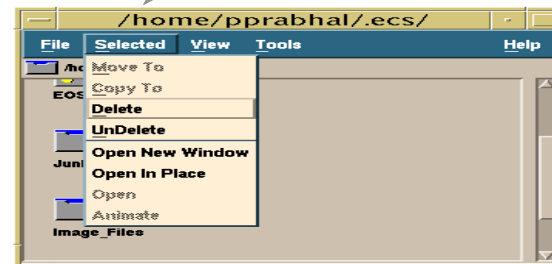
Desktop Actions : Examples

To open a directory into a new desktop window

Click on a directory icon.

Click on "Selected" pulldown menu, user will find that two actions are selectable. Select "Open New Window"

View Pulldown Menu
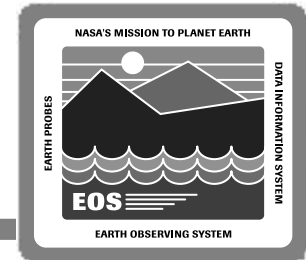
- **View pulldown menu consists of options which are specific to desktop window and which control the layout of the icons.**

- **Desktop window can be displayed in either Rows and Colums (Iconic) format or tree (Hierarchical) format.**

Click on "View" Pulldown menu or type <ALT>-V on the keyboard.

/home/dkuchipu/.ecs/

File   Selected   View   Tools   Help

/home/dkuchip

Duplicate Window

User Preferences

G O   U P   Refresh

..(go up)   Load Actions
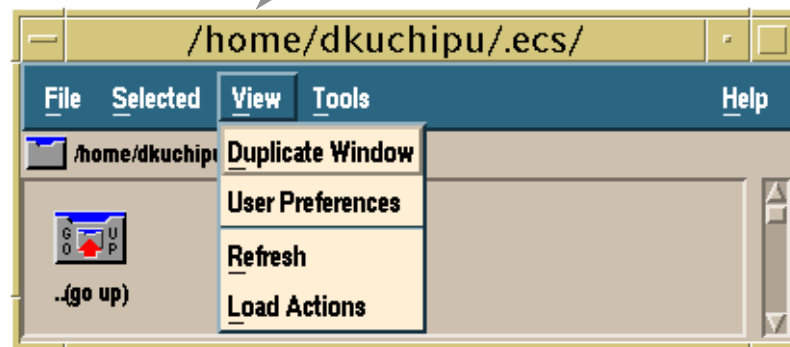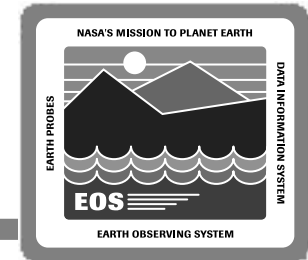
Duplicate Window

- **A duplicate desktop window can be used as a regular window, i.e. user can traverse between directories in this window also.**

Click on "View" Pulldown menu and select "Duplicate Window"

/home/dkuchipu/.ecs/

| File | Selected | View | Tools | | Help |

Duplicate Window
User Preferences
Refresh
Load Actions

/home/dkuchipu

..(go up)

User Preferences

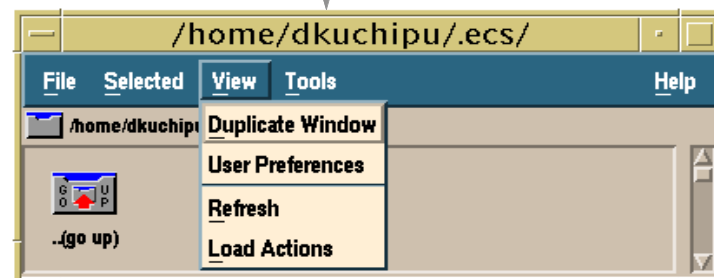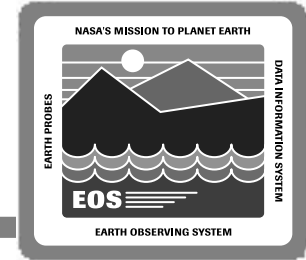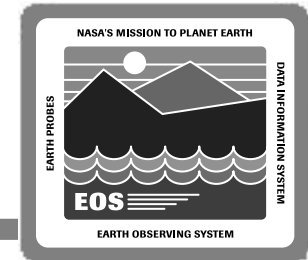- **Users can customize desktop window. They can set these options :**

  - **Directory view**

    - **Iconic** : Iconic view displays desktop objects in the current directory in row and columns format.
    - **Hierarchical** : Hierarchical view allows the users to view the directory contents in tree format. It also displays date and size of the object.

  - **Default action for Directory** : As directories have more than one actions associated with them, user will have the ability to set their preference for selecting the default action. The options are:

    - **Open In Place** : Opens the directory and displays the contents in the <u>same desktop window</u>.
    - **Open New Window** : Opens the directory and displays the contents in a <u>new desktop window</u>.

User Preferences

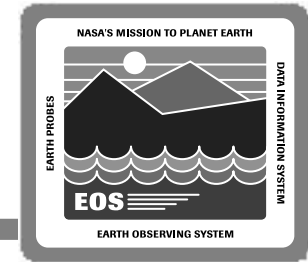- **The following method should be used for setting the preferences:**
  - **For e.g. Set the preferences to Directory View: Iconic & Default Action for Directories: Open In Place.**

Click on "View" pulldown menu and select "User Preferences"

Click on "Iconic" radio button and "Open In Place" radiobutton. Click on one of the pushbutton (OK, Apply, Defaults, Save, Cancel). Refer to the table for exact functionality of these buttons.

OK : Apply the preferences to the desktop window & remove the preferences dialog from screen.

Apply : Apply the preferences to the desktop window but do not remove the preferences dialog from screen.

Defaults : Restore the default preferences.

Save : Save the preferences to disk

Cancel :Remove the preferences dialog from screen.
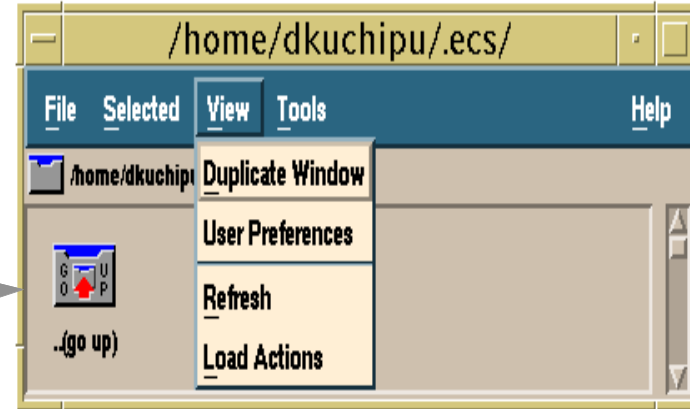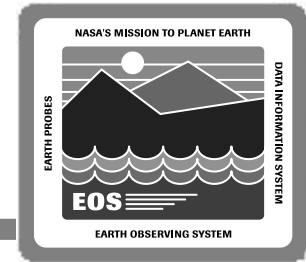
Refresh

- **Refresh option can be used :**
    - **To re-read the directory contents.**

    - **To refresh the display.**

Click on "View" pulldown menu and select "Refresh" for refreshing desktop window.

/home/dkuchipu/.ecs/

| File | Selected | View | Tools | Help |

/home/dkuchipu

Duplicate Window

User Preferences

G O U P

**Refresh**

..(go up)

Load Actions

Load Actions

- **Load Actions : Each user will have a file in their account which contains the following information about the application & document objects:**

  - **Name or type of object. For ex. EOSView or *.hdf**

  - **Icon to be used.**

  - **Command to execute for performing actions.**

  - **Associated actions.**

- **Desktop reads this information at startup and keeps in actions database.**

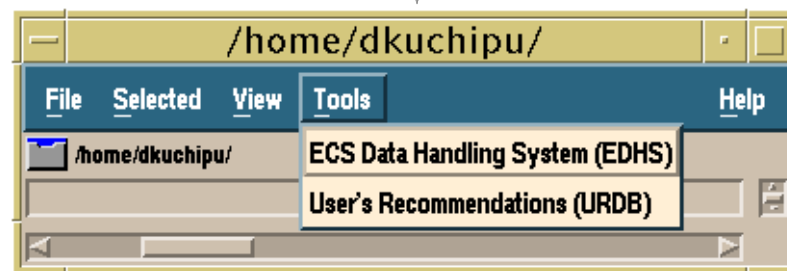- **User should use this option whenever actions file is updated.**

Click on "View" pulldown menu and select "Load Actions" for updating the actions database.
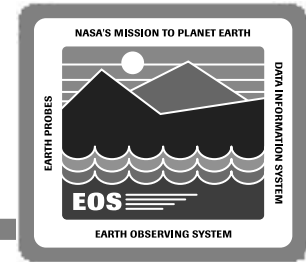
Tools Pulldown Menu
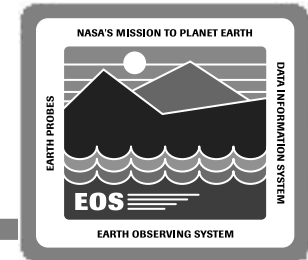
- **Tools pulldown menu consists of common tools used by ECS user.**
- **For ex. To invoke EDHS, use the following method:**

Click on "Tools" pulldown menu, select "ECS Data Handling System (EDHS)"

Other features

These features will be implemented in REL-A :

- **Ability to copy files**
  - through menu shell
  - using drag and modifier key
- **Ability to move files**
  - through menu shell
- **Ability to specify desired icon size**
  - tiny, small, medium, large
- **Message area for displaying various errors, warnings and other messages.**

Other features .....
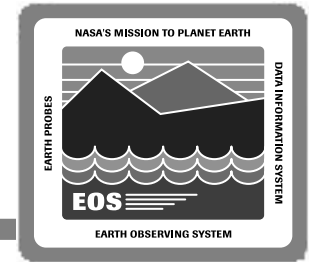
- **Common default color scheme.**
- **Specify fonts through Xdefaults file.**
- **Help**
  - **Html**
  - **Motif**
- **Error Handling**
- **The following choice will be included in User's preferences:**
  - **Iconic format**
  - **Ability to move files to a desired position.**